



gas | electric | steam | telecom

Commissioners:
Neil J. Moriarty, Jr.
Francis J. Hoey, III
Robert H. Griffin

Manager:
James M. Lavelle

October 31, 2008

Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Subject: Reply Comments – RPS Class II Regulations

Dear Sir/Madam:

The City of Holyoke Gas and Electric Department (HG&E) appreciates the opportunity to respond to comments submitted by parties on the new Renewable Portfolio Standards (RPS) for Class II under the Green Communities Act (Act).

HG&E is a municipal gas and electric utility that operates several hydroelectric facilities in western Massachusetts, including an elaborate three mile network of canals that provide cascading head and flow to a series of smaller hydroelectric stations. HG&E currently gets about 2/3rds of its total power supply from renewable resources. Roughly 15% of Holyoke's electrical load is derived from energy generated from existing hydroelectric facilities up to 5 megawatts that meet the Class II RPS criteria ("Small Hydro"). It is this area that we focus our reply comments on.

Background of Small Hydro – Fuel Costs Not Free and Capital Costs are Significant

HG&E feels strongly that the inclusion of Small Hydro under the Class II sources is a necessary provision to ensure that these hydro facilities have sufficient revenues to offset their high capital, operation, and maintenance costs. The current and future energy, capacity and ancillary market products through the ISO-New England do not cover alone the significant capital costs required to perform major overhaul and refurbishment of existing hydro facilities. In fact, such major hydro overhaul can come at a price that exceeds that of the installed per kilowatt cost of a new peaking or base-load fossil-fuel plant. Without a viable and active RPS program in place for vintage units, many of the Commonwealth's existing hydro units will become – or have already been designated – decommissioned, vacated, or simply taken off-line while otherwise the main civil infrastructure (i.e., dam, tailraces, powerhouses) remain unused.

HG&E's fifteen Small Hydro facilities, comprising thirty generating units, are very representative of the types of small vintage hydroelectric generation units that are located within the Commonwealth. The average age of these units are around 80 years old, with civil structures over a century in age, and many are at the end of their useful life. Unfortunately without sufficient supporting revenues, these units are operated using sound preventative maintenance procedures but are band-aided to continue operations as opposed to extensive and costly overhauling that is often the only solution for long-term continued operation. Once these units fail, they are removed from service until a benefit to cost analysis can provide adequate returns.

Of the 30 Small hydro units that HG&E owns in Holyoke, we have 1 unit that has been decommissioned, 5 units that have been removed from service, 4 units that have been de-rated from nameplate capacity for various reasons, and 5 other units that will be run and band-aided only until failure. Therefore, it has already been determined that half of HG&E's eligible Small hydro units will become unusable over the next decade. Further because HG&E has a cascading canal system, if HG&E loses hydro units on the 1st level canal then it would not be able to provide sufficient water to hydro units on the 2nd and 3rd level canals, hence causing a further loss of this Small hydro power.

Only through separate funding through the MA RPS program would HG&E be able to maintain its existing vintage hydroelectric generating units into the future. This is not a windfall to existing hydro generators, but instead a prudent source of funds that will allow generators to maintain and increase electrical output from these vintage hydro units scattered throughout New England.

It is incorrect to assume as some commenters have that Small Hydro has no fuel costs and little or no incremental capital cost requirements. In fact, ongoing and changing environmental and compliance costs provide a significant cost to the water and are requirements that need to be met to continue operations (hence water/fuel is not free). The operating and maintenance costs of Small Hydro is much greater than hydro facilities of a larger size based on \$/MWh unit costs. And, ongoing capital costs are required by all Small Hydro owners to its civil, mechanical, and electrical systems to maintain long-term viability as well as to improve environmental performance and/or increase generation efficiency.

How should the Annual Class II RPS percentage rate be determined, and what should that rate be?

HG&E agrees with the several commenting parties that the main purpose of Class II is to keep existing renewable generators on-line. The preference should be, if possible, to limit those qualified facilities to those that sell electricity for delivery to Massachusetts consumers or at the very least can demonstrate that they meet all of the strict environmental and compliance requirements of existing renewable generators located in Massachusetts.

The amount of pre-1998 renewable generators is finite and should be used for establishing the minimum annual percentage required to promote the continued operation of existing qualified Class II resources. This finite number may need to include pre-1998 qualified facilities in balance of New England as well as a reasonable portion from the adjacent control area to ISO-NE; then this can be reduced by the percentage available within other New England states' respective equivalent RPS classes where similar MA Class II renewable resources could also be certified.

What criteria should be required for any of the specified eligible technologies or fuels?

HG&E agrees with the several commenting parties that DOER should utilize, especially for hydro facilities, the several regulatory compliance requirements that are already in place. Hydro, like no other energy resource seeking MA RPS certification, is subjected to such a well defined process of review, conducted by state and federal agencies, under the oversight of a dedicated federal bureaucracy. DOER should reference this review and certification process as sufficient to satisfy the provisions of the Act. If other states' individual requirements are not as rigid as MA, then such generators outside MA should show compliance to such additional MA requirements before becoming certified in the MA RPS.

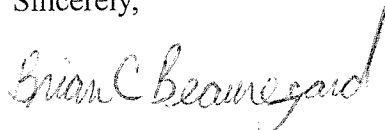
HG&E does not believe that there should be a separate carve-out for waste-to-energy and biomass wood facilities as some commenters have requested, especially since hydro resources have already been limited to only energy from existing facilities up to 5 megawatts. Hydroelectric facilities are indigenous and offer a carbon-free energy source and should not be any further constrained through the Class II rules. Hydro does not contribute to air pollution, acid rain, or ozone depletion, and does not produce any toxic wastes. As such, hydro plays and should continue to play an integral part in meeting the Commonwealth's long-term goals of renewable supply. Hydroelectric qualifying facilities must be kept on a level and non-discriminatory playing field. If any carve-outs are done, it should be thought out very carefully in order to ensure the continued operation of these vital Small Hydro facilities that will be required to meet the short and long-term goals of the Commonwealth.

What should the Alternative Compliance Payment (ACP) amount be for Class II, and how should it be calculated?

Assuming each year the appropriate percentage is set, then the ACP payment amount for Class II could be set to 50% of the Class I ACP which would provide some uniformity with other New England states. Since the existing percentage required may be difficult to calculate, it is recommended that DOER consider the use of a floor price at least during the initial years to ensure that the Class II market does not flood, with supply substantially exceeding demand. This floor price would ensure that sufficient minimum revenues are available to maintain operation of existing qualified facilities.

Thank you again for the opportunity to provide these comments. Should you have any questions, please do not hesitate to contact me at 413-536-9352.

Sincerely,



Brian C. Beauregard
Superintendent